

Appl. No. : 09/771,673
Filed : January 29, 2001

AMENDMENTS TO THE CLAIMS

Please amend Claim 15.

1-10. (Canceled).

11. (Withdrawn) A method for etching a substrate, comprising:

placing a substrate in an etching chamber;

introducing at least one of a first etchant and a first etch catalyst originating from a first source into said etching chamber via an auxiliary chamber positioned within a first path, said introducing comprising intermittently closing an inlet of the auxiliary chamber after introduction of said at least one of a first etchant and a first etch catalyst followed by opening an outlet of the auxiliary chamber to discharge said at least one of a first etchant and first etch catalyst into said etching chamber, such that the inlet is closed when the outlet is opened;

introducing at least one of a second etchant and a second etch catalyst originating from a second source via a second path;

etching said substrate;

flushing said etching chamber; and

removing said substrate from said etching chamber.

12. (Withdrawn) The method of Claim 11, wherein said flushing of said etching chamber is carried out via said auxiliary chamber, said auxiliary chamber being evacuated after etching and prior to refilling the auxiliary chamber.

13. (Withdrawn) The method of Claim 11, further comprising shutting off said at least one of a second etchant and a second etch catalyst to said chamber when said auxiliary chamber is connected to said etching chamber.

14. (Withdrawn) The method of Claim 11, wherein the first etchant is hydrogen fluoride.

15. (Currently Amended) An installation for etching a substrate by simultaneous exposure to two etching gases, the two etching gases forming a corrosive mixture, the installation, comprising:

an etching chamber for a substrate, the etching chamber having an opening;

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a piping system coupled to the opening and providing for at least a first fluid feed and a second fluid feed, wherein the first fluid feed is connected at a source end to a source of a first etching gas, wherein the second fluid feed is connected at a source end to a source of a second etching gas, and wherein the first and second fluid feeds are configured to separately provide the first and second etching gases to the etching chamber via the piping system; **[[and]]**

an auxiliary chamber positioned within the piping system and having an inlet and an outlet, wherein the inlet includes a first controllable shut-off valve and is in communication with the first fluid feed, wherein the outlet includes a second controllable shut-off valve and is in communication with the etching chamber, and wherein ~~only one of said first and second shut-off valves are configured to be open only one at a time~~ open at a time; and

a third controllable shut-off valve positioned in the piping system in the second fluid feed, wherein the third shut-off valve and the second shut-off valve are configured to be open only one at a time.

16. (Previously Presented) The installation of Claim 15, wherein the piping system includes a bypass line for bypassing said auxiliary chamber.

17. (Previously Presented) The installation of Claim 15, wherein said etching chamber is connected to a vacuum pump.

18. (Previously Presented) The installation of Claim 15, wherein the piping system includes a valve coupled to the second fluid feed.

19. (Previously Presented) The installation of Claim 15, wherein said etching chamber is of a plastic material and is configured to withstand a reduced pressure in said etching chamber.

20. (Previously Presented) The installation of Claim 19, wherein said plastic material comprises polyvinylidene fluoride.

21. (Previously Presented) The installation of Claim 15, wherein the first etching gas comprises hydrogen fluoride.

22. (Previously Presented) The installation of Claim 21, wherein the second etching

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23. (Previously Presented) The installation of Claim 22, wherein the second etching gas is selected from the group consisting of acetic acid, formic acid and water.

24. (Previously Presented) The installation of Claim 23, wherein the second etching gas comprises acetic acid.